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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,657	05/18/2006	Donald-Bane Stewart	67316.000003	1723
27682 7590 09/08/2008 HUNTON & WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT RIVERFRONT PLAZA, EAST TOWER 951 EAST BYRD ST. RICHMOND, VA 23219-4074				
EXAMINER FLORY, CHRISTOPHER A				
ART UNIT 3762		PAPER NUMBER		
MAIL DATE 09/08/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/563,657

Applicant(s)

STEWART, DONALD-BANE

Examiner

CHRISTOPHER A. FLORY

Art Unit

3762

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-41 and 50-55 is/are allowed.
- 6) ☒ Claim(s) 1-5, 24-29 and 42-49 is/are rejected.
- 7) ☒ Claim(s) 6-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
- Paper No(s)/Mail Date 01/05/2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 23 recites the limitation "the body posture" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 27-29, 42 and 46-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Lovejoy et al. (US 5,453,186, hereinafter Lovejoy'186).

Regarding claims 1, 42, 49, Lovejoy'186 discloses an apparatus and method of synthesizing ECG signals (title; abstract) comprising receiving signals from a first group of electrodes connected to predetermined locations on a body to acquire a first set of ECG signals and a further signal using a subset of the first set of signals, wherein the

electrodes comprise the standard 2 lead electrode sites V2, V5, and V5R (column 4, line 12 through column 5, line 17).

Regarding claims 2-4, Lovejoy'186 additionally discloses electrodes at RA and LA, or on the right and left side of the torso level with the limbs, or anywhere on the right and left sides of the body, in addition to V2, V5 and V5R (column 4, lines 57-63).

Regarding claim 5, Lovejoy'186 discloses electrode placement at the same height as the manubrium on the mid-clavicle line (column 4, lines 33-46).

Regarding claims 27-29 and 46, Lovejoy'186 discloses both storing and displaying the standard 12 lead ECG in real time (column 1, lines 13-19).

Regarding claim 47, Lovejoy'186 shows leads corresponding to each of the electrodes in Fig. 1.

Regarding claim 48, Lovejoy'186 shows the electrode patch being removable from the processing and storage means in Fig. 5

6. Claims 1-5, 24-29 and 42-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Meij et al. (US 6.690.967, hereinafter Meij'967).

Regarding claims 1, 42, 49, Meij'967 discloses an apparatus and method of synthesizing ECG signals comprising receiving signals from a first group of electrodes connected to predetermined locations on a body to acquire a first set of ECG signals and a further signal using a subset of the first set of signals (title; abstract), wherein the electrodes comprise the standard 2 lead electrode sites V2, V5, and V5R (column 3, lines 27-46; column 4, lines 14-24; column 9, lines 27-33).

Regarding claims 2-5, Meij'967 additionally discloses electrodes at RA and LA, or on the right and left side of the torso level with the limbs, or anywhere on the right and left sides of the body, in addition to V2, V5 and V5R (column 8, lines 27-41).

Regarding claims 24-26, Meij'967 discloses the method further comprising the calculation and application of a simulation matrix as described in the claim language (Figures 3 and 4 and related paragraphs).

Regarding claims 27-29 and 46, Meij'967 discloses both storing and displaying the standard 12 lead ECG in real time (Fig 4, database 110, screen 312 and related paragraphs).

Regarding claims 43 and 44, Meij'967 discloses a linear combination processing array (matrix 307) and a signal processor circuit under software control (preprocessor 104 or controller 308).

Regarding claim 45, Meij'967 shows separate units in Fig. 4.

Regarding claim 47, Meij'967 discloses leads corresponding to each of the electrodes (abstract).

Regarding claim 48, Meij'967 shows the electrode patch being removable from the processing and storage means (Fig. 1, memory 106).

Allowable Subject Matter

7. Claims 6-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 30-41 and 50-55 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Flory whose telephone number is (571) 272-6820. The examiner can normally be reached on M - F 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Christopher A. Flory/
9 September 2008

/George Manuel/
Primary Examiner